

Serial No. 10/736,561

Attorney Docket No: FS-F03218-01

Submission for RCE/Response to Office action of November 28, 2006

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

1. (currently amended) An image-forming combined system for medical diagnosis application comprising a combination of A a photothermographic material and an X-ray intensifying screen,

wherein the photothermographic material comprises: a support and, disposed on both sides of the support, image-forming layers, each of which comprises a non-photosensitive organic silver salt comprising silver behenate, a photosensitive silver halide, a binder, a bisphenol reduction agent, a color toning agent, an organic polyhalogen compound, and a silver iodide complex forming agent that, after thermal development, substantially reduces visible light absorption caused by the photosensitive silver halide[[.]] ;

~~wherein a silver iodide content in the photosensitive silver halide is in a range from 90 mol% to 100 mol%;~~

the photosensitive silver halide is in a form of tabular grains having an average sphere-equivalent diameter in a range from 0.3  $\mu\text{m}$  to 5.0  $\mu\text{m}$  and has a silver iodide

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content of 90 mol% to 100 mol%;

the silver iodide complex forming agent is contained in a range from  $\pm 50$  to 300 mol% relative to an amount of the photosensitive silver halide;

the silver iodide complex forming agent reduces a transition absorption of silver iodide of the photothermographic material after thermal development, which resides in the vicinity of 423 nm, to 1/2 or less than that before the thermal development; and

the photothermographic material is capable of being recorded imagewise by using an the X-ray intensifying screen.

2. (cancelled)

3. (cancelled)

4. (original) The photothermographic material of claim 1, wherein at least 50%, in terms of a projected area, of the photosensitive silver halide is occupied by tabular grains having an aspect ratio of from 2 to 100.

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5. (previously presented) The photothermographic material of claim 1 ,  
wherein at least 50%, in terms of a projected area, of the photosensitive silver halide is  
occupied by tabular silver halide grains having an aspect ratio of from 2 to 50 and being  
deposited with a silver salt in an epitaxial growth manner.

6. (previously presented) The photothermographic material of claim 1 ,  
wherein at least 50%, in terms of a projected area, of the photosensitive silver halide is  
occupied by tabular silver halide grains having an aspect ratio of from 2 to 50 and  
having one or more dislocation lines respectively.

7. (previously presented) The photothermographic material of claim 1 ,  
wherein the silver iodide complex forming agent is a compound represented by one of  
the following formulas (1) and (2):

Formula (1)

Y

Formula (2)

 $S(Z)_n$ 

wherein, in the formula (1), Y represents a non-metallic atomic group  
necessary for forming a 5- to 7-membered heterocycle containing at least one of a

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nitrogen atom and a sulfur atom;

the heterocycle formed by Y may be saturated or unsaturated, or may have a substituent; and

substituents on the heterocycle formed by Y may be combined with each other to form a ring; and

wherein, in the formula (2), Z represents a hydrogen atom or a substituent;

n represents an integer of 1 or 2,

when n represents 1, S and Z are combined with each other by a double bond;

when n represents 2, S and each of two Zs are combined with each other by a single bond;

when n represents 1, Z does not represent a hydrogen atom; and

when n represents 2, two Z's may be same as, or different from, each other, but neither of the two Zs represents a hydrogen atom.

8. (original) The photothermographic material of claim 5, wherein the silver salt is silver chloride or silver bromide.

9. (cancelled)

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10. (original) The photothermographic material of claim 1, wherein the average sphere-equivalent diameter of the photosensitive silver halide is in a range from 0.4  $\mu\text{m}$  to 3.0  $\mu\text{m}$ .

11. (previously presented) The photothermographic material of claim 1, further comprising at least one compound having an adsorptive group to the photosensitive silver halide and a reducing group, or a precursor thereof.

12. (original) The photothermographic material of claim 11, further comprising a compound represented by the following formula (I) as the compound having an adsorptive group and a reducing group:

Formula (I)



wherein A represents a group adsorbable to silver halide (hereinafter referred to simply as “adsorptive group”);

W represents a divalent linking group;

n represents 0 or 1; and

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B represents a reducing group.

13. (original) The photothermographic material of claim 1, further comprising a compound in which a one-electron-oxidized form generated by an oxidizing of one electron therein can release one or more electrons.

14. (original) The photothermographic material of claim 1, further comprising a development accelerator.

15. (previously presented) The photothermographic material of claim 1, further comprising at least one phthalic acid or a derivative thereof.

16. (cancelled)

17. (previously presented) The photothermographic material of claim 15, imagewise exposed by using an X-ray intensifying screen,

wherein, when exposure is conducted with an exposure quantity in a range from 0.005 lux-second to 0.07 lux-second by using a monochromatic light which has a

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same wavelength as that of a main luminescent peak of the X-ray intensifying screen and a half bandwidth of  $15\pm 5$  nm, an image density to be obtained by removing an image-forming layer provided on a side opposite to an exposed face from the support becomes fog plus 0.5.

18. (original) The photothermographic material of claim 1, further comprising an ultraviolet ray-absorbing agent.

19. (original) The photothermographic material of claim 1, exposed by using an X-ray intensifying screen having a luminescent peak in an ultraviolet region.

20. (previously presented) The photothermographic material of claim 1, comprising the image-forming layer provided only on one surface of the support, wherein, when exposure is conducted by using an X-ray intensifying screen and a monochromatic light which has a same wavelength as that of a main luminescent peak of the intensifying screen and a half bandwidth of  $15\pm 5$  nm, an image density after thermal development becomes fog plus 0.5 at a time of an exposure quantity of from 0.01 lux-second to 0.07 lux-second, and an image contrast after thermal development is

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**in a range from 3.0 to 5.0.**